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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,125	03/30/2001	Hernan G. Otero	21710-68378	6818

28062 7590 11/17/2005

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EXAMINER

OYEBISI, OJO O

ART UNIT PAPER NUMBER

3628

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/823,125		OTERO ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	OJO O. OYEBISI		3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09/12/2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 8-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

This office action is responsive to applicant's Amendment filed Sept 12, 2005. In the Amendment filed Sept 12, 2005 the following has occurred: claims 1, 6, 8 and 9 have been amended, and claim 7 has been cancelled. The amended of claims 1,6,8 and 9 has necessitated the withdrawal the rejection based on 35 USC 101. Claims 1-14 have been reconsidered in this office action. However, Claims 1-6 and 8-14 stand rejected in this office action.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-2, 5, 8-14** are rejected under 35 U.S.C 102(e) as being anticipated by Kane (U.S. Patent 6,317,728).

**Re claim 1:** Kane discloses a method for computerized trading comprising:

- A human being entering parameters for a trading algorithm to input a trading order into a logic engine (i.e., decision logic, see abstract).
- using a first plug-in (i.e., agent) in said logic engine for implementing the trading algorithm (see col. 5, lines 5-10).
- inputting data for said order into said logic engine (see abstract).
- processing the order with said logic engine, using said plug-in (see abstract).
- executing said order (see abstract).

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**Re claim 2:** Kane discloses a method wherein the step of inputting a trading order into a logic engine further comprises inputting an order through an ordering system (i.e., data acquisition system, see abstract).

**Re claim 5:** Kane discloses a method wherein the step of executing said order further comprises outputting said order through an ordering system (col. 3, lines 34-36).

**Re claim 8:** Kane discloses an apparatus for computerized trading comprising:

- a logic engine for processing trading orders (see abstract);
- an interface to said logic engine to receive from a human being parameters for a trading algorithm (data channel, see fig 1, elements 12, 13);
- a first plug-in (i.e., agent) in said logic engine (i.e., decision logic) for implementing the trading algorithm (see col. 5, lines 5-10). Whereby said logic engine processes order received via said interface (see col. 5, lines 2-11); wherein said logic engine, said interface and said first plug-in are software recorded on a computer-readable medium and capable of execution by a computer.

**Re claim 9:** Kane discloses an apparatus for computerized trading comprising:

- a logic engine (i.e., decision logic) for processing trading orders (see abstract);
- a first interface (i.e., input) to said logic engine for processing orders from a human being parameters for a trading algorithm (i.e., each decision agents representing a respective buy and a respective sell rule, see abstract);
- a first plug-in (i.e., agent) in said logic engine for implementing the trading algorithm (col. 5, lines 5-10). Whereby said logic engine processes orders received via either of said first and second interfaces (see col. 5, lines 2-8, also see abstract); wherein said logic engine, said first interface and said second interface, and said first plug-in are software recorded on a computer-readable medium and capable of execution by a computer.

**Re claim 10:** Kane discloses an apparatus wherein said first interface further comprises an Input driver (i.e., agent, see col. 15, lines 5-15).

**Re claim 11:** Kane discloses an apparatus wherein said second interface further comprises an exchange driver (i.e., agent, see col. 15, lines 5-15).

**Re claim 12:** Kane discloses an apparatus wherein said first interface (i.e., input) further comprises an interface to an ordering system (see abstract).

**Re claim 13:** Kane discloses an apparatus wherein said second interface (i.e., input) further comprises an interface to an ordering system (see abstract).

**Re claim 14:** Kane further discloses an apparatus wherein said logic engine further comprises a Core Processing Area (i.e., central processing unit, see col. 5, lines 5-10).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kane (U.S. Patent 6,317,728).

**Re claim 3:** Kane discloses a method wherein the step of inputting a trading order into a logic engine further comprises inputting an order through an ordering system (i.e., data acquisition system, see abstract). Kane does not explicitly disclose a method wherein the step of inputting a trading order into a logic engine further comprises inputting a complex order through an ordering system. However, since Kane does not really distinguish between "order" and "complex order." One of ordinary skill in the art would have obviously know that Kane system is sophisticated enough to handle any sort of trading orders (i.e., regular or complex).

10. **Claims 4, 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kane (U.S. Patent 6,317,728) in view of Microsoft Computer Dictionary (MCD hereinafter: Microsoft Computer Dictionary 5<sup>th</sup> edition, page 345).

**Re claim 4:** Kane discloses a method for computerized trading comprising: the steps of processing trading orders (see abstract) except for a step of de-constructing the said Complex Order into at least one event and action. The method of deconstructing

complex order into event/action is a well-taught modular design in object-oriented modular programming (see Microsoft computer dictionary 5<sup>th</sup> edition, page 345).

Therefore, it would have been obvious to one of ordinary skill in the art to implement this well-taught modular design method in Kane to allow programmers to debug and recover very quickly from program crashes.

**Re claim 6:** Kane discloses a method for computerized trading comprising:

- A human being entering parameters for a trading algorithm to input a ComplexOrder into a logic engine through an ordering system.
- using a first plug-in (i.e., agent) in said logic engine for implementing the trading algorithm (see col. 5, lines 5-10).
- inputting data for said order into said logic engine (see abstract).
- Kane discloses a method wherein the step of executing said order further comprises outputting said order through an ordering system (col. 3, lines 34-36).

However, Kane does not explicitly teach the step of deconstructing said complex order into events and actions. The method of deconstructing complex order into event/action is a well-taught modular design in object-oriented modular programming (see Microsoft computer dictionary 5<sup>th</sup> edition, page 345). Therefore, it would have been obvious to one of ordinary skill in the art to implement this well-taught modular design method in Kane to allow programmers to debug and recover very quickly from program crashes.

### ***Response to Arguments***

5. Applicant's arguments filed Sept 12, 2005 have been fully considered but they are not persuasive. In the remarks, the applicant argues in substance that Kane's system is "fully automated" and thus does not call for a human being entering parameters for a trading algorithm. In response to the applicant's argument, the examiner maintains that Kane's system is indeed fully automated, but at the same time, the intelligent agents that make trading decisions in Kane's system represent respective buy and sell rules (see Kane, abstract). These respective buy and sell rules are pre-programmed by a human being, and it is these rules that intelligent agents follow and base their decisions on. Thus, the intelligent agents in Kane's constitute the trading algorithm disclosed by the applicant, and the pre-programmed buy and sell rules, disclosed in Kane's, constitute a human being entering parameters disclosed by the applicant. The examiner further asserts that algorithms, intelligent agents, plug-ins, and buy and sell rules, in this context, are all software that are just as intelligent as the human being that create them.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OJO O. OYEBISI whose telephone number is (571) 272-8298. The examiner can normally be reached on 8:30A.M-5:30P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HYUNG S. SOUGH can be reached on (571)272-6799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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